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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/672,304

09/26/2003

Young-Je Cho

8071-47 (OPP 030615 US)

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EXAMINER

DUONG, TAI V

ART UNIT

PAPER NUMBER

2871

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/672,304

Applicant(s)

CHO ET AL.

Examiner

Tai Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-7, 13, 14 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 3, 22-24 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/7/06, 10/10/06, 11/16/06</u> . | 6) <input type="checkbox"/> Other: _____ |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/10/2006 has been entered.

The indicated allowability of claims 3, 4, 22, 24, 30 and 31 is withdrawn in view of the newly discovered references cited by Applicant. Rejections based on the newly cited reference(s) follow.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recited feature "a *third* spacer having a height *equal to or lower than* the second spacer (a second spacer having a height lower than the first spacer)" of claims 28 and 29 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose how to make the panel assembly wherein a second spacer having a height lower than the first spacer, and a *third* spacer having a height *lower than* the second spacer (claim 28) or the height of the *third* spacer is *equal* to the height of the second spacer (claim 29).

Claims 3 and 22 are objected to because of the phrase "formed on the panel for supporting the panel" (line 4). It is suggested to change the above phrase to "formed on the panel for supporting *an opposite* panel" for the claim language being clear.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3, 22, 23 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2002-031805 cited by Applicant. Note Fig. 4 and especially Fig. 7 which identically disclose the claimed panel assembly comprising a plurality of column spacers formed on the panel wherein the spacers have at least two different heights or at least two different contact areas (different lengths) with the panel wherein the spacers comprise a plurality of first spacers SOC(2) and a plurality of second spacers SOC(1) having a height lower than the first spacers and having a contact area wider than the first spacers ($S1 > S2$, paragraph 0062).

Claims 22, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11-264968 cited by Applicant. Note Fig. 2 which identically disclose the claimed panel assembly comprising a plurality of column spacers formed on the panel wherein the spacers have at least two different heights and at least two different lengths with the panel and wherein the spacers comprise a first spacer 30h, a second spacer 30A having a height lower than the first spacer, and a third spacer 30B having a height lower than the second spacer.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-031805. The only difference between the panel assembly of the JP 2002-031805 and that of the instant claim is the JP 2002-031805 is silent about the height difference between the first spacers and the second spacers being in a range of about 0.3-0.6 microns. However, it has been held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984).

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-264968. Claim 24 is similar to claim 4 and is rejected for the same reasons set forth in the above rejection.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-264968. The only difference between the panel assembly of the JP 11-264968 and that of the instant claim is the height of the third spacer being equal to the height of the second spacer. It would have been obvious to a person of ordinary skill in the art to employ in the panel assembly of the JP 11-264968 the third spacer having height equal to that of the second spacer for simplifying the fabrication process of the spacers.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-264968 in view of in view of Satoh (US 6,870,593) of record.

The only difference between the panel assembly of the JP 11-264968 and that of the instant claim is the color filters having different thicknesses. Satoh discloses that it was known to employ color filters having different thicknesses (23, 24, 25 in Fig. 12B) for realizing originally designed color tones. Thus, it would have been obvious to a person of ordinary skill in the art in view of Satoh to employ color filters having different thicknesses in the panel assembly of the JP 11-264968 for obtaining a color display with high color purity.

Claims 13 and 14 are allowed for the same reasons set forth in the last Office Action.

Claims 5-7 and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art of record discloses or suggests the length range and spacer concentration of the first and second spacers, as recited in claims 5-7 and 25-27

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

TD
TVD

12/06

TOANTON
PRIMARY EXAMINER